

No. 610,144.

Patented Aug. 30, 1898.

W. C. MILES.
ROTARY PAPER CUTTING KNIFE.

(Application filed July 17, 1897.)

(No Model.)

Fig. 1.

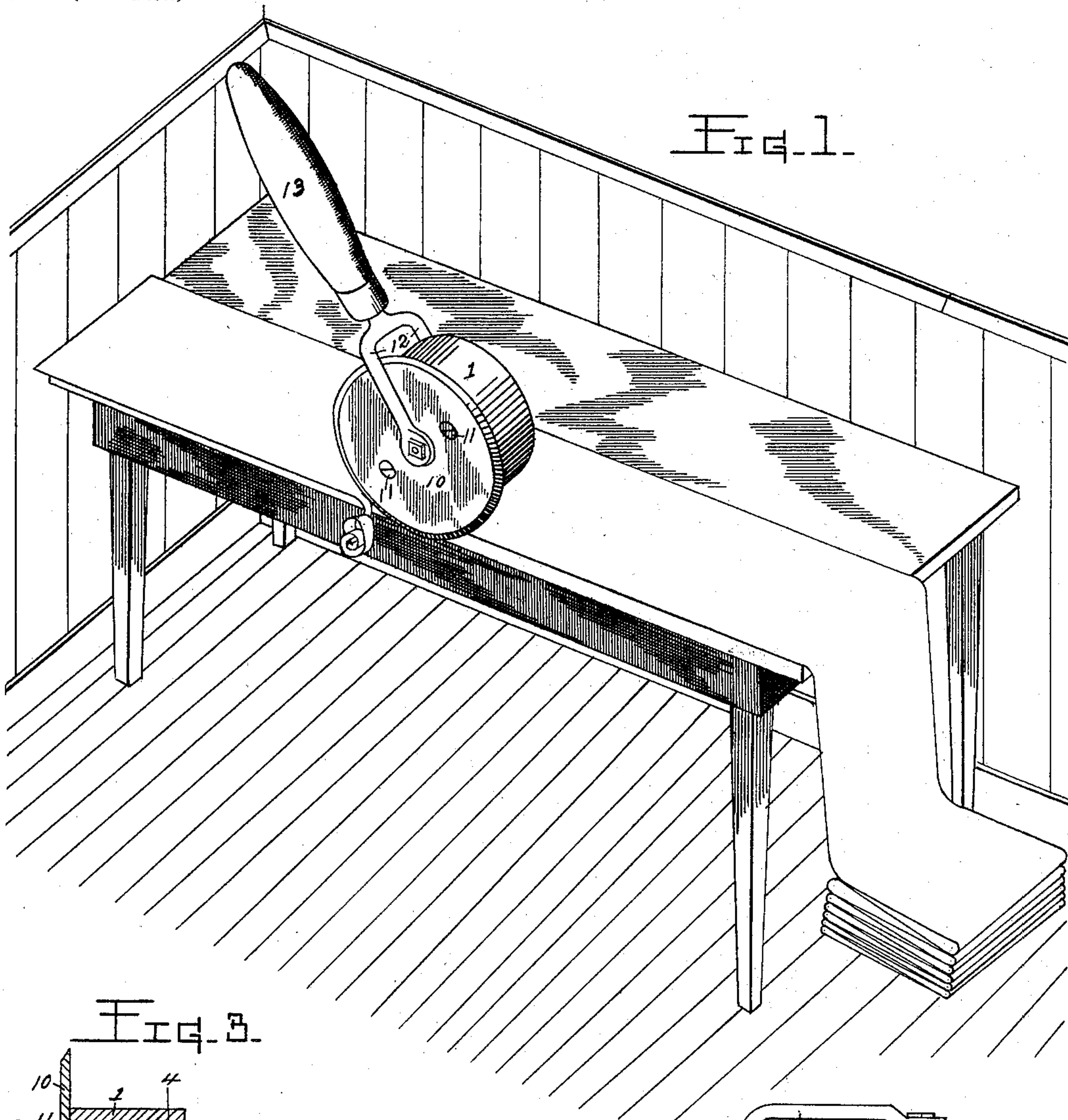


Fig. 3.

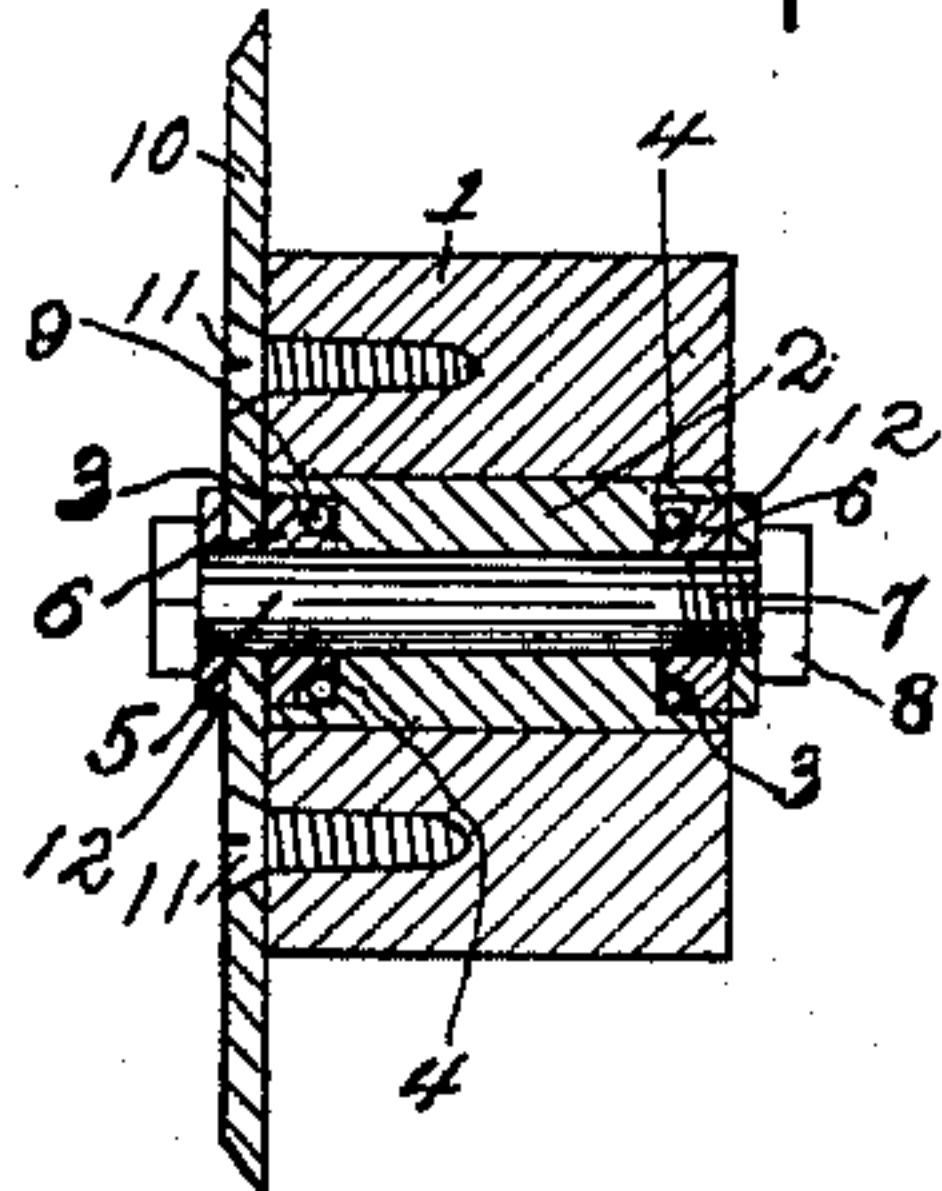


Fig. 2.

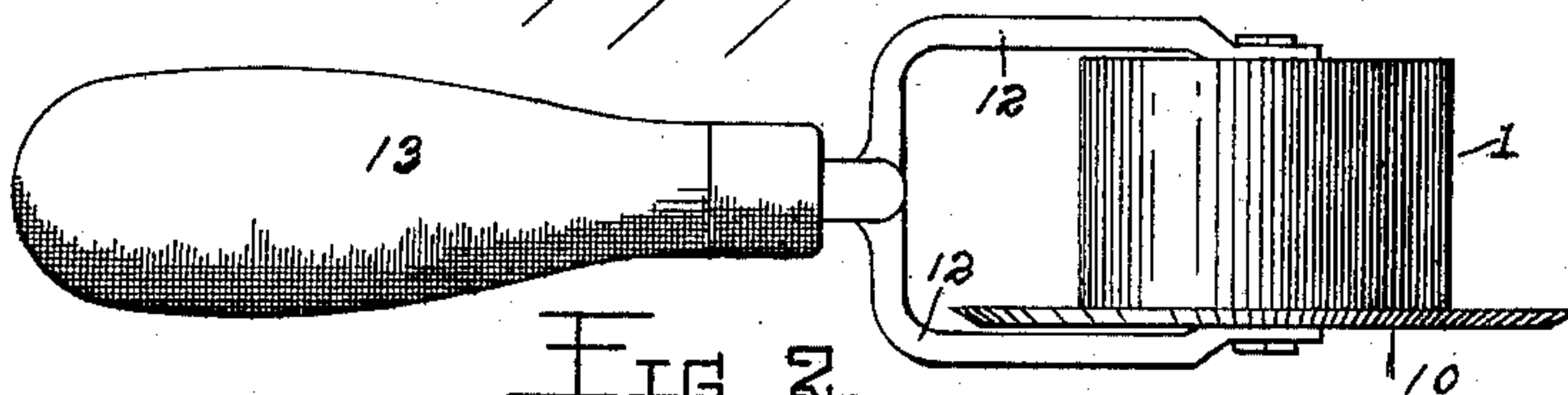
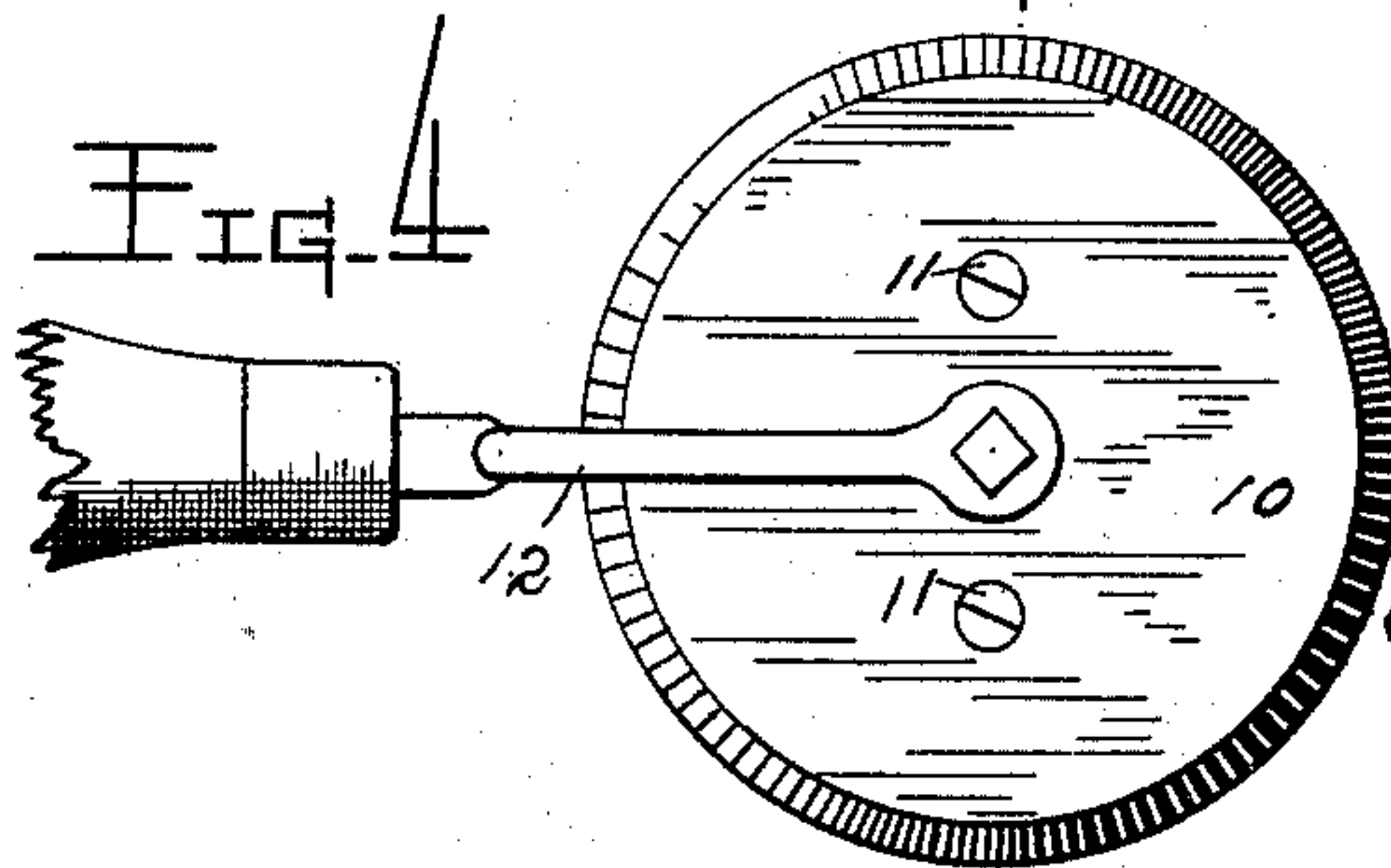


Fig. 4.



Witnesses
W. Williams, Jr.
E. M. Sweet, Jr.

W. C. Miles.
Inventor

By
W. H. Arnold & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM C. MILES, OF HUNTINGTON, INDIANA.

ROTARY PAPER-CUTTING KNIFE.

SPECIFICATION forming part of Letters Patent No. 610,144, dated August 30, 1898.

Application filed July 17, 1897. Serial No. 644,914. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. MILES, a citizen of the United States, residing at Huntington, in the county of Huntington and State of Indiana, have invented certain new and useful Improvements in Rotary Paper-Cutting Knives; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in a paper-cutting knife, which, while useful for most any purpose for which a knife of this character is desirable, will be found especially advantageous for paper-hangers' use, as it may be employed to trim off the usual blank margin of wall-paper, whether said paper be dry or wet.

The object of my invention is to provide a knife which may be cheaply manufactured and of a convenient form and which will enable the operator to easily carry the same from place to place in the ordinary tool-bag of artisans, the knife-blade proper being in the form of a disk, preferably having a beveled edge, which may be easily sharpened and kept in good working order.

In the accompanying drawings, Figure 1 is a perspective view of my invention applied to use, an ordinary table being used to cooperate therewith. Fig. 2 is a top plan view of the knife complete. Fig. 3 is a central section of Fig. 2 on a line with the axle. Fig. 4 is a side view of my knife complete, showing part of the handle broken away.

My invention consists in a knife made in the form of a disk, the edges of which are beveled on either side, as may be preferred, and in certain accessories deemed necessary to utilize the rotatable action of the blade thus provided.

In carrying out my invention I provide the cylindrical body or barrel 1, having a central longitudinal bore in which I locate the tubular axle 2, having at each end a recess 3, forming the shoulder 4. A locking bolt or axle proper, 5, is provided and arranged to pass through the tubular axle 2 and is designed to hold the several parts together, as will be hereinafter specifically pointed out.

The recesses 3 above referred to, provided

in the end of the axle, are designed to accommodate the conical head or holder 6, adjustably secured upon the bolt or axle proper, 5, by means of the screw-threads 7, formed thereon, and the locking-nut 8 cooperating with said threads.

Interposed between the conical head 6 and the shoulder 4 I dispose a series of steel balls 9 of suitable diameter, and thus provide a ball-bearing mounting for the blade 10, which, it will be seen by reference to the drawings, is secured to one end of the barrel or cylindrical body 1 by means of the locking-screws 11 or the substantial equivalent thereof, making it possible to utilize said blade at the expense of a minimum amount of friction of the parts.

A bifurcated handle consisting of the arms 12 and the handle proper, 13, is provided, one of said arms being designed to rest on either side of the barrel or body 1 and be secured thereto by means of the axle proper, 5, and the headed end and nut thereof.

It will be seen that the several parts of my improved knife may be cheaply and readily constructed and expeditiously assembled, and that when the parts are made in quantities they are readily interchangeable, thus making it possible to repair the knife at a minimum cost. By beveling the edge of the blade it may be easily kept in a very sharp condition, making it possible to cut paper even after it has become wet, which is often desirable, and while my improved knife is especially designed for cutting paper it will be found equally efficient when used in lieu of a pair of shears for cutting out patterns from cloth and other similar uses.

Having thus fully described the construction of my improved knife, the operation thereof may be stated to be as follows: When used for trimming wall-paper, the paper to be trimmed is preferably disposed on the side of a table or other support, so that the margin to be removed will project slightly over the edge thereof, when the knife can easily be applied and readily directed by means of the edge of the table, so that the shearing movement will be set up and the margin cleanly cut off and removed, thus rendering it unnecessary to otherwise specially prepare said edge for forming a perfect overlap when the paper is placed in position upon the wall.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As an improvement in revoluble knives
5 for paper-hangers, &c., the combination with the revoluble blade, of a barrel secured thereto, an axle taking through said barrel and having each end thereof recessed; a conical head taking into each recess and designed
10 to contact with antifriction-balls placed therein and means for holding said heads in position, substantially as specified and for the purpose set forth.

2. As an improvement in revoluble knives
15 for paper-hangers, &c., the combination with a revoluble blade, of a barrel secured thereto,

an axle taking through said barrel and having each end thereof recessed, a conical head taking into each recess and designed to contact with antifriction-balls placed therein; an
20 operating-handle having arms adapted to extend to either side of the knife thus provided, and suitable means for holding said heads and arms in their operative positions, substantially as specified and for the purpose set
25 forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. MILES.

Witnesses:

W. F. CARSON,

H. E. ROSEBROUGH.